

ALASKA COASTAL MANAGEMENT PROGRAM
CONSISTENCY EVALUATION
GRANITE POINT 3D

Pursuant to the following evaluation, the project as proposed is consistent with applicable ACMP statewide standards and affected coastal resource district enforceable policies (copies of the policies are available on the ACMP web site at <http://www.alaskacoast.state.ak.us>).

PROJECT TITLE AND DESCRIPTION : GRANITE POINT 3D

Union Oil Company of California (UOCQ plans to conduct a 3D seismic survey during the period February 1 thru June 15, 2007 a transition zone seismic survey within the Granite Point region on lands managed by the State, Native Corporation and Private ownership.

UOCC proposes survey & mulching operations to start early February, drilling operations February-April; Marine operations May 1- June 15; recording from May-June (land and marine together). UOCC proposes to use 2-4 Mulchers (flail-type blade systems) to clear heavy alder and spruce from seismic lines of 3.5 to 4 meter widths without disturbing the top mat of the soil. The mulchers would be mounted on tracked machines exerting 3 to 5 psi and operated so as to avoid older-growth spruce and alders while clearing brush and smaller trees in a manner that does not leave long stretches of visible cut lines. The Mulchers will maintain DNR-required setbacks from established roads, creeks and river drainages. Drilling would be accomplished with track drills and/or heliportable drills (FN110 drill rigs) drilling holes 3" in diameter to a depth of 25 feet. Explosives will be 5 pounds of cast primer cut to fit detonation system. A total of 6,000 gallons of fuel will be stored on-site in modem containment enclosures (capacity = 155% of total volume).

STATE ID. No.

AFFECTED COASTAL RESOURCE DISTRICT(S)

Kenai Peninsula Borough

CHAPTER 112. STATEWIDE STANDARDS OF THE ALASKA COASTAL MANAGEMENT PROGRAM

Article 2. Uses & Activities

11 A.A.C. 112.200. Coastal development

Standard

- (a) In planning for and approving development in or adjacent to coastal waters, districts and state agencies shall manage coastal land and water uses in such a manner that those uses that are economically or physically dependent on a coastal location are given higher priority when compared to uses that do not economically or physically require a coastal location.*
- (b) District and state agencies shall give, in the following order, priority to*
 - (1) water-dependent uses and activities;*
 - (2) water-related uses and activities; and*
 - (3) uses and activities which are neither water-dependent nor water-related for which there is no practicable inland alternative to meet the public need for the use or activity.*
- (c) The placement of structures and the discharge of dredged or fill material into coastal water must, at a minimum, comply with the standards contained in 33 C.F.R. Parts 320-323, revised as of July 1, 2003.*

Evaluation:

- a) The proposed UOCC 3D Seismic Project is located in the Coastal Zone, and is water related.
- b) The proposed UOCC Granite Point project is extended off land to receive full coverage on subsurface full fold coverage of existing or proposed prospects and is not planned to interfere with water dependent activities during the timeframe for the program.
- c) Nationwide Permit with the US Corps of Engineers addresses this activity.

I Consistent

Q Inconsistent

Q Not Applicable

11 A.A.C. 112.210. Natural hazard areas

Standard

- (a) In addition to those identified in 11 A. A. C. 112.900, the department, or a district in a district plan, may designate other natural processes or adverse conditions that present a threat to life or property in the coastal area as natural hazards. Such designations must provide the scientific basis for designating the natural process or adverse condition as a natural hazard in the coastal area, along with supporting scientific evidence for the designation.*
- (b) Areas likely to be affected by the occurrence of a natural hazard may be designated as natural hazard areas by a state agency or, under 11 AA. C 114.250fbJ, by a district.*

- (c) *Development in a natural hazard area may not be found consistent unless the applicant has taken appropriate measures in the siting, design, construction and operation of the proposed activity to protect public safety, services and the environment from potential damage caused by known natural hazards.*
- (d) *For purposes of (c) of this section, "appropriate measures in the siting, design, construction and operation of the proposed activity" means those measures that, in the judgment of the coordinating agency, in consultation with the department's Division of Geological and Geophysical Surveys, the Department of Community and Economic Development as state coordinating agency for the National Flood Insurance Program under 44 C.J.H. 60.25, and other local and state agencies with expertise,*
- (1) satisfy relevant codes and safety standards; or*
 - (2) in the absence of such codes and standards;*
 - (A) the project plans are approved by an engineer who is registered in the state and has engineering experience concerning the specific natural hazard; or*
 - (B) the level of risk presented by the design of the project is low and appropriately addressed by the project plans.*

Evaluation

- (a) The KPB Coastal Management districts will have an opportunity to identify this proposed development project as to whether it is being located in a designated hazard area or that it presents a threat to life or property. UOCC does not foresee this being an issue.
- (b) N/A
- (c) Since the proposed Seismic Project is designed to acquire seismic data, no permanent structures will be constructed and clearing of vegetation and other visible environmental impacts shall be minimized.
- (d) N/A

☒ Consistent

☐ Inconsistent

☐ Not Applicable

11 A.A.C. 112.220. Coastal access

Standard

District and state agencies shall ensure that projects maintain and, where appropriate, increase public access to, from, and along coastal water.

Evaluation:

- a) UOCC will maintain public access to recreational lands within the project areas. Public access to existing easements will not be impeded for extended periods of time.

☒ Consistent

☐ Inconsistent

☐ Not Applicable

11 A.A.C. 112.230. Energy facilities

Standard

(a) The siting and approval of major energy facilities by districts and state agencies must be based, to the extent practicable, on the following standards:

- (1) site facilities so as to minimize adverse environmental and social effects while satisfying industrial requirements;*
- (2) site facilities so as to be compatible with existing and subsequent adjacent uses and projected community needs;*
- (3) consolidate facilities;*
- (4) consider the concurrent use of facilities for public or economic reasons;*
- (5) cooperate with landowners, developers, and federal agencies in the development of facilities;*
- (6) select sites with sufficient acreage to allow for reasonable expansion of facilities;*
- (7) site facilities where existing infrastructure, including roads, docks, and airstrips, is capable of satisfying industrial requirements;*
- (8) select harbors and shipping routes with least exposure to reefs, shoals, drift ice, and other obstructions;*
- (9) encourage the use of vessel traffic control and collision avoidance systems;*
- (10) select sites where development will require minimal site clearing, dredging and construction in productive habitats;*
- (11) site facilities so as to minimize the probability, along shipping routes, of spills or other forms of contamination which would affect fishing grounds, spawning grounds, and other biologically productive or vulnerable habitats, including marine mammal rookeries and hauling out grounds and waterfowl nesting areas;*
- (12) site facilities so that design and construction of those facilities and support infrastructures in coastal areas of Alaska will allow for the free passage and movement of fish and wildlife with due consideration for historic migratory patterns;*
- (13) site facilities so that areas of particular scenic, recreational, environmental, or cultural value, identified in district plans, will be protected*
- (14) site facilities in areas of least biological productivity, diversity, and vulnerability and where effluents and spills can be controlled or contained;*
- (15) site facilities where winds and air currents disperse airborne emissions that cannot be captured before escape into the atmosphere;*
- (16) select sites so that associated vessel operations or activities will not result in overcrowded harbors or interfere with fishing operations and equipment.*

(b) The uses authorized by the issuance of state and federal leases, easements, contracts, rights-of-way or permits for mineral and petroleum resource extraction are uses of state concern.

Evaluation:

(a) N/A; the seismic crew will be transitory supported by helicopters and tracked vehicles when not on the road system. No permanent structures will be

constructed. Crews will be housed in the local facilities. Operations are not expected to substantially alter coastal resources. (b) N/A; no mineral or petroleum resource extraction will take place. Significant public need exists for Alaskan natural gas development, and such development cannot occur without development projects such as the proposed Granite Point Seismic Project. Alaska statutes define a use of state concern as including "activities pursuant to a state oil and gas lease ... because of their magnitude or the magnitude of their effect on the economy of the state or the surrounding area, are reasonably likely to present issues of more than local significance" (AS 46.40.210(6)).

1) The proposed project has shown adequate measures to minimize adverse environmental and social effects while satisfying industrial requirements.

2) The proposed project is compatible with existing and subsequent adjacent uses and project community needs.

3) The proposed project takes advantage of existing roads and trails as access points.

4) The proposed project will not preclude concurrent use/development of facilities for public or economic reasons;

5) UOCC will cooperate with private landowners, Native corporations and State agencies during the program.

6) N/A;

7) The proposed seismic project only involves temporary field operations in order to gather geologic data, no permanent structures will be built and the operations are not expected to substantially alter coastal resources;

8) N/A;

9) N/A;

10) N/A;

11) N/A;

12) The proposed project will not inhibit the free passage and movement of fish and wildlife;

13 -16. No cultural resource sites are anticipated to be impacted by the project;

13) The proposed program is not expected to compromise the biological productivity or diversity of the Granite Point River area;

14) N/A;

15) N/A;

16) N/A;

Part (c) of this standard recognizes that oil and gas development is a use of state concern.

☒ Consistent

☐ Inconsistent

☐ Not Applicable

11 AAC. 112.240. Utility routes and facilities

Standard

- (a) *Utility routes and facilities must be sited inland from beaches and shorelines unless*
 - (1) *the route or facility is water-dependent or water related; or*
 - (2) *no practicable inland alternative exists to meet the public need for the route or facility.*
- (b) *Utility routes and facilities along the coast must avoid, minimise or mitigate*
 - (1) *alterations in surface and ground water drainage patterns;*
 - (2) *disruption in known or reasonably foreseeable wildlife transit;*
 - (3) *blockage of existing or traditional access.*

Evaluation:

(a) Road and exploration unit Infrastructure will be used for expediting and vehicle traffic when necessary.

- (1) Crew and supplies will be transported by barge, trucks or air.
- (2) N/A

(b) Proposed Program routes will cover the mapped program area during various times dependent on tides and program parameters.

- (1) Minor alteration in surface due to drilling of surface for source charges only 3" diameter.
- (2) N/A
- (3) Due to program work in the area, there may be limited access but only temporary. With proper communication, there should not be an issue.

☒ Consistent

☐ Inconsistent

☐ Not Applicable

11AAC. 112.250. Timber harvest & processing

Standard

A.S. 41.17(Forest Resources and Practices Act) and the regulations adopted under that chapter with respect to the harvest and processing of timber are incorporated into the program and constitute the components of the program with respect to those purposes.

Evaluation

(a) N/A

☒ Consistent

☐ Inconsistent

☐ Not Applicable

11 AAC. 112.260. Sand & gravel extraction

Standard

Sand and gravel may be extracted from coastal waters, intertidal areas, barrier islands and spits if there is no practicable alternative to coastal extraction that will meet the public need for the sand or gravel. **Evaluation**

(a) N/A

☒ Consistent

☐ Inconsistent

☐ Not Applicable

11AAC. 112.270. Subsistence

Standard

- (a) *A project within a subsistence use area designated by the department or under 11 A. A. C. 114.250(g) must avoid or minimise impacts to subsistence uses of coastal resources.*
- (b) *For a project within a subsistence use area designated under 11 A. A. C. 114.250(g), the applicant shall submit an analysis or evaluation of reasonably foreseeable adverse impacts of the project on subsistence use as part of*
- (1) a consistency review packet submitted under 11 AA. C 110.215; and*
 - (2) a consistency evaluation under 15 C.F.JR. 930.39, 15C.JF.jR. 930.58, or 15C.F.JR. 930.76.*
- (c) *Repealed 10/29/2004, Register 172.*
- (d) *Except in nonsubsistence areas identified under AS. 16.05.258, the department may, after consultation with the appropriate district, federally recognised Indian tribes, Native corporations, and other appropriate persons or groups, designate areas in which a subsistence use is an important use of coastal resources as demonstrated by local usage.*
- (e) *For purposes of this section, "federally recognised Indian tribe," "local usage," and "Native corporation" have the meanings given in 11 A. A. C. 114.990.*

Evaluation

- (a) Stakeholders in the area will meet with UOCC officials and operations personnel to address any concerns related to subsistence. At this time, no known subsistence issues are present.
- (b) A subsistence mitigation plan to involve stakeholder's of the area will be addressed.
- (c) N/A
- (d) No such area is considered necessary for this program.
- (e) N/A

☐ Consistent

☐ Inconsistent

☐ Not Applicable

11 AAC. 112.280. Transportation routes & facilities

Standard

Transportation routes and facilities must avoid, minimise or mitigate

- (1) alterations in surface and ground water drainage patterns;*
- (2) disruption in known or reasonably foreseeable wildlife transit; and*
- (3) blockage of existing or traditional access.*

Evaluation

- (1) All activities on land involve tracked vehicles with low psi (3-5 psi) that move across snow covered terrain. No expected disturbance to surface or ground water drainage patterns expected.
- (2) Some mulching will occur to allow tracked drills to navigate thru forested areas. Mulched trails will meander and take path of least resistance so as not to create a visual path.
- (3) No traditional access will be blocked or newly created.

☒ Consistent

☐ Inconsistent

☐ Not Applicable

Article 3. Resources & Habitats

11 A.A.C. 112.300. Habitats

Standard

- (a) *Habitats in the coastal area which are subject to the program are*
- (1) *offshore areas;*
 - (2) *estuaries;*
 - (3) *wetlands;*
 - (4) *tideflats;*
 - (5) *rocky islands and seacliffs;*
 - (6) *barrier islands and lagoons;*
 - (7) *exposed high energy coasts;*
 - (8) *rivers, streams and lakes and the active floodplains and riparian management areas of those rivers, stream and lakes; and*
 - (9) *important habitat.*
- (b) *The following standards apply to the management of the habitats identified in (a) of this section:*
- (1) *offshore areas must be managed to avoid, minimise or mitigate significant adverse impacts to competing uses such as commercial, recreational or subsistence fishing to the extent that those uses are determined to be in competition with the proposed use;*
 - (2) *estuaries must be managed to avoid, minimise or mitigate significant adverse impacts to*
 - (A) *adequate water flow and natural water circulation patterns; and*
 - (B) *competing uses such as commercial, recreational or subsistence fishing, to the extent that those uses are determined to be in competition with the proposed use;*
 - (3) *wetlands must be managed to avoid, minimise or mitigate significant adverse impacts to water flow and natural drainage patterns;*
 - (4) *tideflats must be managed to avoid, minimise or mitigate significant adverse impacts to*
 - (A) *water flow and natural drainage patterns; and*
 - (B) *competing uses such as commercial, recreational or subsistence uses, to the extent that those uses are determined to be in competition with the proposed use;*
 - (5) *rocky islands and sea cliffs must be managed to*
 - (A) *avoid, minimise or mitigate significant adverse impacts to habitat used by coastal species; and*
 - (B) *avoid the introduction of competing or destructive species and predators;*
 - (6) *barrier islands and lagoons must be managed to avoid, minimise or mitigate significant impacts*
 - (A) *to flows of sediments and water;*
 - (B) *from the alteration or redirection of wave energy or marine currents that would lead to the filling in of lagoons or the erosion of barrier islands; and (C) from activities that would decrease the use of barrier islands by coastal species, including polar bears and nesting birds;*

- (7) exposed high-energy coasts must be managed to avoid, minimise or mitigate significant adverse impacts*
 - (A) to the mix and transport of sediments; and (B) from redirection of transport processes and wave energy;*
 - (8) rivers, streams and lakes must be managed to avoid, minimise or mitigate significant adverse impacts to*
 - (A) natural water flow;*
 - (B) active floodplains; and*
 - (C) natural vegetation within riparian management areas; and*
 - (9) important habitat*
 - (A) designated under **11A.A. C. 114.2JO(fr)** must be managed for the special productivity of the habitat in accordance with district enforceable policies adopted under **11 A. A. C. 114.270(g)**; or*
 - (B) identified under (c)(1)(B) or (C) of this section must be managed to avoid, minimise or mitigate significant adverse impacts to the special productivity of the habitat.*
- (c) For purposes of this section,*
- (1) "important habitat" means habitats listed in (a)(1)-(8) of this section and other habitat in the coastal area that are*
 - (A) designated under **11 A A. C. 114.250(6)**;*
 - (B) identified by the department as a habitat*
 - (i) the use of which has a direct and significant impact on coastal water; and*
 - (ii) that is shown by written scientific evidence to be biologically and significantly productive; or*
 - (C) identified as state game refuges, state game sanctuaries, state range areas or fish and game critical habitat under **A.S. 16.20**,*
 - (2) "riparian management area" means the area along or around a waterbody within the following distances, measured from the outermost extent of the ordinary high water mark of the waterbody:*
 - (A) for the braided portions of a river or stream, 500 feet on either side of the waterbody; (B) for split channel portions of a river or stream, 200 feet on either side of the*
waterbody; (C) for single channel portions of a river or stream, 100 feet on either side of the
waterbody; (D) for a lake, 100 feet of the waterbody.

Evaluation

- a) Potential impacts would be to rivers, streams, and lakes; and important upland habitat.
- b) UOCC has evaluated the most reasonable means of minimizing impacts. While the proposed project is not expected to enhance the biological, physical

Consistency Evaluation

and chemical characteristics of the habitat, it is expected at a minimum to maintain the habitat characteristics to support living resources. UOCC will cross fish-bearing streams following precautionary winter-travel stipulations d) There is no evidence indicating that the proposed project does not conform to the standards in (b) and (c) of this section.

☒ Consistent

☐ Inconsistent

☐ Not Applicable

11 A.A.C. 112.310. Air, Land & Water Quality

Standard

Notwithstanding any other provision of this chapter, the statutes and regulations of the Department of Environmental Conservation with respect to the protection of air, land, and water quality, identified in A.S. 46.40.040(b)¹ are incorporated into the program and, as administered by that department, constitute the exclusive components of the program with respect to those purposes. Evaluation

- a) There does not appear that UOCC will not conform to above standard with respect to their proposed program.

☒ Consistent

☐ Inconsistent

☐ Not Applicable

11 A.A.C. 112.320. Historic, Prehistoric, and Archeological Resources

Standard

(a) The department will designate areas of the coastal zone that are important to the study, understanding or illustration of national, state or local history or prehistory, including natural process.

(b) A project within an area designated under (a) of this section shall comply with the applicable requirements of AS. 41.JJ.010- [41.Jf.240](#) and 11 AA. C. 16.010- 11 AA. C. 16.900

Evaluation:

- a) Identified areas important to national, state or local history or prehistory will be avoided in the proposed program. SHPO office will identify known sites, proposed area will be mapped with known sites and setback on sites of cultural or historical significance. Any new sites that are suspected will be revealed work will stop so as not to disturb any resources.
- b) UOCC will comply with applicable requirements of AS. 41.JS.010-41.JS.240 and 11 AA C. 16.010- 11A.A.C 16.900 and will evaluate the cultural resource potential of the project area prior to program start.

☒ Consistent

☐ Inconsistent

☐ Not Applicable

1 Effective Date: 7/3/90

**Kenai Peninsula Borough
Coastal Management Plan
Enforceable and Administrative Policies**

Kenai Peninsula Borough Coastal Management Program.

2.0 Coastal Development

2.1 Navigation Obstruction

Structures, pipelines and buoys placed in navigable waters shall be visibly marked and placed to minimize navigation hazards or obstruction.

- **Evaluation: N/A**

2.2 Floating Facilities

For purposes of this section, a "floating facility" is defined as a raft, houseboat, barge, or boat, whether powered or not, that is moored or anchored in any certain location, excluding harbors and marinas, for a period of 14 days or more, and is not primarily intended for transportation.

a. The following criteria shall be considered in determining whether or not to permit a floating facility at a specific site:

1. Potential conflicts with recreation sites, mariculture sites, fish and wildlife concentration areas, subsistence use areas.

- **Evaluation: N/A. There will be no floating facilities. All vessels will be workboats and will not be anchored for long periods of time to exceed more than a few days, therefore the rest of this enforceable policy 2.3.2 - 2.3.6 does not apply.**

2.3 Commercial Fishing

a. To the extent feasible and prudent, all temporary and permanent developments, structures, and facilities in marine and estuarine waters shall be sited, constructed, and operated in a manner that does not create a hazard or obstruction to commercial fishing operations.

- **Evaluation: Program is scheduled to avoid commercial fishing operations.**

b. Within marine and estuarine waters of the coastal area, operators of activities relating to oil, gas, and mining exploration and production, shall provide timely written notification to a list of fishing organizations maintained by the Kenai Peninsula Borough to apprise commercial fishing interests of the schedule and location of development activities prior to initiation of the project. This notice shall include a schedule of activities and a map or description of any potential conflicts or physical obstructions which may impact or preclude commercial fishing

opportunities or damage/contaminate fishing gear including but not limited to subsea pipelines, subsea wellhead structures, and modifications to the natural shoreline topography or sea-bottom profile (e.g., causeways, artificial islands, dredge spoil disposal sites).

- **Evaluation: UOCC will provide timely written notification to fishing organizations maintained by the KPB.**

c. To the extent feasible and prudent, offshore resource exploration and development activities shall be scheduled and/or located to avoid interference with commercial fishing and subsistence activities.

- **Evaluation: UOCC will consult with local commercial fishing operators associations and local subsistence stakeholders to avoid conflict of interest.**

2.4 Dredging and Filling

Projects that require dredging or filling in streams, rivers, lakes, wetlands, or saltwater areas including tideflats, will be located, designed, constructed, and maintained in a manner so as to:

- a. avoid significant impacts to important fish and wildlife habitat;
- b. avoid significant interference with fish migration, spawning, and rearing as well as other important life history phases of wildlife;

5 Effective Date: 7/3/90

- c. limit areas of direct disturbance to as small an area as possible;
- d. minimize the amount of waterborne sediment traveling away from the dredge or fill site; and
- e. maintain circulation and drainage patterns in the area of the fill.

- **Evaluation: Drilling of shotholes will be 3" diameter and 25 feet deep and all cuttings will go back in the hole after the charge has been deployed.**

2.5 Disposal of Dredged Material

Dredged materials disposed onshore will be diked or similarly contained and stabilized in order to prevent erosion or leaching of harmful or toxic substances into wetlands or fishbearing waters.

- **Evaluation: N/A**

2.6 Mitigation

All land and water use activities shall be planned and conducted to mitigate potential adverse impacts on fish and wildlife populations, habitats, and harvest activities. Mitigation shall include the following sequential steps:

- a. Avoid the loss of natural fish and wildlife populations, habitat, and harvest activities;
- b. When the loss cannot be avoided, minimize loss by incorporating measures to reduce the amount or degree of loss;

c. When the loss cannot be avoided or minimized, restore or rehabilitate the resource that was lost or disturbed to its pre-disturbance condition, to the extent feasible and prudent; or

d. "When loss or damage is substantial and irreversible and the above objectives cannot be achieved, compensation for the resource and/or harvest loss shall be considered. In the case of loss of habitat production potential, enhancement of other habitats shall be considered as an alternative means of compensation. In general, compensation with similar habitats in the same locality is preferable to compensation with other types of habitat or habitats located elsewhere.

The cost of mitigation relative to the benefits to be gained will be considered in the implementation of the policy.

- **Evaluation: UOCC feels that the seismic program has taken all measures to reduce impacts to fish and wildlife populations, habitat and harvest activities by adhering to the enforceable policies. No impact is expected.**

2.7 Cumulative Impacts

The cumulative effects of proposed new and existing development on ambient air and water quality and coastal habitats shall be considered in the review or renewal of coastal projects.

- **Evaluation: Because the program is for a short duration, no cumulative impacts are expected.**

3.0 Geophysical Hazards

3.1 Design and Siting Criteria

Development in areas with known geological hazards shall be located, designed, constructed and managed to minimize risk to human life and property damage.

- **Evaluation: No development will occur, all activity is transitory and since the program is designed to acquire seismic data, no permanent structures will be constructed and clearing of vegetation and other visible environmental impacts shall be minimized.**

3.2 Floodway and Floodplain Development

To the extent prudent and feasible, structures (including bridges and flood diversion structures such as dikes) shall not be located in the floodway. Bridges and culverts that cross the floodway shall be designed and maintained to accommodate flow through the structure with no increase to base flood levels and to avoid retaining and spreading flood waters behind them. Development in the 100-year floodplain, as defined by the Flood Insurance Rate Map (FIRM) prepared for Federal Emergency Management Agency, is contingent upon obtaining a Floodplain Development Permit from the Kenai Peninsula Borough.

- **Evaluation: Equipment, other than vessels will not enter open water areas of a watercourse during the winter program. Stream banks will not be modified, altered, or disturbed to facilitate stream crossings with our tracked vehicles.**

3.3 Erosion

Development and resource extraction activities shall be sited and conducted to minimize accelerated shoreline erosion or adverse impacts to shoreline processes. Developers shall retain existing vegetative cover in erosion-prone areas to the greatest extent feasible and prudent. In cases where development or other activities lead to removal of vegetation, erosion shall be prevented or, if it occurs, shall be remedied through revegetation or by other appropriate measures.

- **Evaluation: Stream banks will not be modified, altered, or disturbed to facilitate stream crossings with our tracked vehicles.**

3.4 Landslides, Mass Wasting, and Avalanche Hazards

Unless there are no feasible and prudent alternatives new developments shall avoid areas subject to landslides, mass wasting, and avalanche hazards. Developments shall incorporate appropriate siting/design/construction measures to avoid increasing risk to existing or potential development.

- **Evaluation: N/A**

3.5 Use of Public Land

State and Borough land in the 100-year floodplain and other hazard-prone areas shall be maintained in public ownership unless a greater public need would be met by disposing or developing such land and appropriate design and construction techniques are incorporated to minimize risk to life and property.

- **Evaluation: N/A**

4.0 Recreation and Public Access

4.1 Recreational Use Designation

The following areas within the Kenai Peninsula Borough Coastal Management Boundary shall be designated for recreational use:

- a. State, federal and local parks, trails and recreational facilities.
- b. Public land or water which receives significant use by sport fishermen, clam diggers or recreational users.
- c. Public land or waters which have high potential for recreational use because of physical, biological, or cultural features.

- **Evaluation: The project falls within state lands and waters that may be considered use for recreational users. UOCC will provide adequate notice to near community populations and to the recreational users of**

the area of the impending activities and timing so as not to adversely affect or impact these public opportunities.

4.2 Conflicts with Recreational Use

Activities which could conflict with recreational use of designated recreation areas shall be conducted to minimize conflicts.

- **Evaluation: Project timing is such that it should not adversely affect or impact recreational opportunities.**

4.3 Open Space Areas

Publicly owned shorelines, beaches and upland areas which possess high value recreation, scenic, wildlife or environmental quality or are subject to natural hazards, shall be retained as public open space or recreation areas.

- **Evaluation: Project timing is such that it should not adversely affect or impact the recreational or environmental quality of the area. Program duration is 3-4 months and only in one area for 7-10 days.**

4.4 Public Access

Public access routes to coastal waters and recreational land shall be maintained and to the extent feasible and prudent, increased when public land is leased, disposed, or subdivided.

- **Evaluation: N/A**

5.0 Energy and Industrial Development

5.1 Industrial Facility Siting

The siting and approval of major industrial facilities and related activities are subject to State Standards 6 AAC 80.070(b) regarding energy facility siting with the following additions to said State standards: Numbers 1 through 7 and numbers 11 through 14 of the State standards shall be expanded to encompass "related activities" in addition to "facilities."

- **Evaluation: State standards of 11 A.A.C. 112.230. Energy facilities have been addressed above relating to this section.**

5.2 Water Resources

a. Commercial/Industrial operations shall use necessary measures to prevent drilling wastes, oil spills, and other toxic or hazardous materials from contaminating surface and groundwater.

Consistency Evaluation

- **Evaluation: The drilling of 3" diameter holes to a depth of 25 feet does not produce drilling waste. Oil spill kits are with every vehicle and drill rig for protection of the environment during the seismic activities.**

b. Any industrial water withdrawal shall comply with the requirements of AS 46.15 and may require that aquifer testing of the production well(s) and monitoring of nearby public or private wells be conducted. Results of testing shall be submitted to the Kenai Peninsula Borough and the Alaska Department of Natural Resources; these results should demonstrate what effects the withdrawal of water necessary to serve the fully developed project will have on prior water rights holders within the area of influence.

- **Evaluation: N/A**

5.3 Use of Existing Facilities

To the extent feasible and prudent, existing industrial facilities or areas and pipeline route shall be used to meet new requirements for exploration and production support bases, transmission/shipment (including pipelines and transportation systems), and distribution of energy resources.

- **Evaluation: N/A**

5.4 Habitat Protection

Projects which require dredging, clearing or construction in productive habitats shall be designed to keep these activities to the minimum area necessary for the project.

- **Evaluation: N/A**

5.5 Navigation and Commercial Fishing

Activities associated with oil and gas resource exploration, industrial development, or production shall minimize navigational interference and be located or timed to avoid potential damage to fishing gear. Offshore pipelines and other underwater structures will be located, designed or protected so as to allow fishing gear to pass over without snagging or otherwise damaging the structure or gear.

- **Evaluation: UOCC will locate prior to the program all navigational hazards, bathymetry depths, pipelines locates for the offshore program.**

5.6 Pipelines

Pipelines and pipeline right-of-ways shall, to the extent feasible and prudent, be sited, designed, constructed, and maintained to avoid important fishing grounds and to minimize risk to fish and wildlife habitats from a spill, pipeline break, or other construction activities. Pipeline crossings of fishbearing waters and wetlands important to waterfowl and shorebirds shall incorporate mitigative measures, to the

extent feasible and prudent, to minimize the amount of oil which may enter such waters as a result of a pipeline rupture or leak

- **Evaluation: N/A**

5.7 Offshore Structure Debris

Debris from offshore construction activities shall be removed to an approved onshore disposal site on or before completion of construction.

- **Evaluation: N/A**

5.8 Oil Storage

a. Oil produced in offshore areas shall be transported to shore for storage unless transport is determined to have a greater potential for adverse environmental impact than offshore storage.

- **Evaluation: N/A**

b. Oil storage facilities shall be located and bermed in accordance with Policy 13.2 in the Air, Land and Water Quality section of these policies.

- **Evaluation: Fuel storage/bladders are placed in an impermeable secondary containment system that is capable of containing 110% of the volume of the fuel tank. Temporary fuel storage locations will not be sited within a floodplain or within 100 feet of any river, lake or stream.**

5.9 Geophysical Surveys

a. Geophysical surveys will, to the extent feasible and prudent, be located, designed, and constructed in a manner so as to avoid disturbances to fish and wildlife populations, habitats, and harvests. Seasonal restrictions, restrictions on the use of explosives, or restrictions relating to the type of transportation utilized in such operations will be included as necessary to mitigate potential adverse impacts.

- **Evaluation: UOCC will conduct its program during winter season when ground cover of snow and ice is most practicable for operating tracked vehicles and least impacts fish and wildlife populations, habitats and harvests.**

b. Geophysical surveys in fresh and marine waters supporting fish or wildlife will require the use of energy sources such as airguns, gas exploders, or other sources that have been demonstrated to be harmless to fish and wildlife and human uses of fish and wildlife. Blasting for purposes other than geophysical surveys will be approved on a case-by-case basis after all steps have been taken to minimize impacts and when no feasible and prudent alternatives exist to meet the public need.

- **Evaluation: Explosives will not be detonated within, beneath, or adjacent to marine, estuarine, or fresh waters that support fish and wildlife during periods when fish or marine mammals are present unless the detonation of the explosive produces an instantaneous pressure rise in the water body of no more than 2.5 psi or unless the water body, including its substrate, is frozen. Setbacks for this activity for a 5 lb. charge is >82 feet from the high watermark of the waterbody.**

c. Vessels engaged in offshore geophysical exploration will conduct their operations to avoid significant interference with commercial fishing activities. *Intent: Policy 5.9(b) balances several uses of state concern and national interest, including the exploration and production of oil and gas resources and the production and utilisation of the fisheries of Cook Inlet and the Gulf of Alaska. After considering the information available on the value of the fisheries, the potential adverse impacts associated with the use of seismic activities in the transitional zone, the state and Kenai Peninsula Borough have serious concerns about the use of explosives for seismic exploration in marine waters. The state recognises that a limited use of explosives may be necessary to obtain quality seismic data in certain areas of the transitional zone, such as when there is a need to "tie" geophysical information between potential offshore lease tracts and onshore well sites.* Implementation of Policy 5.9(b) will be based on the best available scientific information relative to the significant adverse impacts of explosives and other seismic technology on fish and wildlife. The State of Alaska is reviewing its current policy pertaining to the use of explosives in marine waters, evaluating alternative means of collecting seismic information in the transition zone, and evaluating measures to mitigate adverse impacts on marine life and fishery activities. Should a review of new information and the continuing evaluation of the state's seismic policy by the Kenai Peninsula Borough and the State of Alaska indicate a change to this policy is warranted, the state will pursue such a change.

- **Evaluation: There should not be seismic operations conducted in marine waters of Cook Inlet during regularly scheduled or emergency commercial fishery. For seismic operations between May 15 and September 15 UOCC will provide timely written notification to a list of fishing organizations provided by the Kenai Peninsula Borough to apprise commercial fishing interests of the conduct of the seismic activities prior to beginning the activities.**

5.10 Alternative Energy

Projects using energy sources such as wind, solar, and geothermal will be permitted provided the project conforms to the policies contained in this program and all other applicable laws.

- **Evaluation: N/A**

5.11 Hydroelectric Power

Hydroelectric projects will not dam, divert, or reduce water levels in rivers, streams, or lakes that support important commercial, subsistence, or recreational fish species unless the project is designed to mitigate loss to fish production and any interference with navigation.

- **Evaluation: N/A**

6.0 Transportation and Utilities 7.0

Fishing and Seafood Processing 8.0

Mariculture (Aquatic Farming) 9.0

Timber Management 10.0 Mining and Mineral Processing

- **Evaluation: Section 6.0-10.0 of the KPBCMP enforceable policies do not apply to our seismic activities.**

11.0 Subsistence

11.1 Subsistence Resources

All uses and activities in areas traditionally used for subsistence shall accommodate the use of subsistence resources in the planning, development, and operation of these activities.

11.2 Subsistence Projects

Projects in areas traditionally used for subsistence shall be located, designed, constructed, and operated to minimize adverse impacts to subsistence resources and activities.

11.3 Land and Water Plans

Land and water use plans for public land and waters surrounding the communities of English Bay, Port Graham, Seldovia, and Tyonek shall avoid or minimize impacts to subsistence resources and activities.

11.4 Subsistence Access

Traditional and customary access to subsistence use areas shall be maintained unless reasonable alternative access is provided to subsistence users.

A13 Subsistence Resource Mapping [Administrative Policy]

The Borough Planning Department will work with the communities of English Bay and Port Graham to designate subsistence areas important to these communities as part of the AMSA plan for this area.

- **Evaluation: To address Subsistence Enforceable Policies 11.1-11.4, UOCC will coordinate with the village of Tyonek and the Cook Inlet Marine Mammal Council to inform or program areas. The timing of the program does not present subsistence use conflicts in its present pre-proposed location and timing.**

12.0 Fish and Wildlife Habitat

12.1 Priority Use

Maintenance and enhancement of fish habitat shall be the highest priority use when reviewing proposals for activities which may adversely impact critical spawning, rearing, migration or overwintering areas for fish and shellfish.

- **Evaluation: UOCC has evaluated the most reasonable means of minimizing impacts. "While the proposed project is not expected to enhance the biological, physical and chemical characteristics of the habitat, it is expected at a minimum to maintain the habitat characteristics to support living resources. UOCC will cross fish-bearing streams following precautionary winter-travel stipulations**

12.2 Appropriation of Water

Appropriation of surface or intergravel waters from streams shall not occur at a withdrawal rate or timing which adversely affects anadromous fish habitat, as determined by the Alaska Department of Fish and Game, unless, under the procedures outlined in AS 46.15, the Commissioner of the Department of Natural Resources makes a finding based on public review that the competing use of water is in the best public interest and no feasible and prudent alternative exists.

- **Evaluation: With appropriate setbacks on the creek in the program area, it is not assumed to adversely affect anadromous fish habitat**

12.3 Fish Passage

Development activities, facilities and structures shall be designed, sited, constructed and operated in a manner which does not impede or interfere with timely access and movement of fish. Causeways, gravel berms, culverts, and other obstructions or constrictions to fish movement are of particular concern.

Existing fish passage problems, including perched culverts, man-made stream obstructions, and velocity barriers shall be corrected by the entity responsible for the problem.

- **Evaluation: N/A**

12.4 Bank Stabilization

All bank cuts, fills and exposed earthwork adjacent to a wetland or waterbody must be stabilized to prevent erosion and sedimentation which may occur during or after construction. Bank stabilization measures shall be designed and constructed to protect habitat values by including irregular bank contours and insuring that nearshore water velocities do not increase.

- **Evaluation: UOCC will ensure that the contractor will to the extent possible cross major waterbodies with mechanized equipment at a jogged approach in areas with little or no banks to reduce any bank erosion.**

12.5 Water Intake Structures

Water intake pipes used to remove water from fishbearing waters shall be surrounded by a screened enclosure and velocity shall be limited so as to prevent fish entrainment and impingement.

- **Evaluation: No water withdrawal is expected on this program.**

12.6 Use of Explosives

To protect fish, sensitive marine mammals, and other aquatic fauna, explosives shall not be detonated within, beneath, or adjacent to marine, estuarine, or fresh waters that support fish and wildlife during periods when fish or marine mammals are present unless the detonation of the explosives produces an instantaneous pressure rise in the water body of no more than 2.5 psi (pounds per square inch) or unless the water body, including its substrate, is frozen.

- **Evaluation: To protect fish, and other aquatic organisms and ensure the project is consistent with the KPBCMP enforceable policies 5.9 a Geophysical Surveys. 12.6 Use of Explosives. UOCC will adhere to this enforceable policies by maintaining setbacks as determined by ADF&G, which is 82 feet for a 5 pound charge.**

12.7 Seabird Colonies and Marine Mammal Haul-outs

Seabird colony sites and haul-outs and rookeries used by sea lions and harbor seals (as identified in ADF&G Regional Guides or with the best available information at the time of project review) shall not be physically altered or disturbed by structures or activities in a manner that would preclude or interfere with continued ties in a manner that would preclude or interfere with continued use of these sites. To the extent feasible and prudent, development structures and facilities with a high level of noise, acoustical or visual disturbance shall maintain a one-half mile buffer from identified use areas for sea lions, harbor seals, and marine birds during periods when these species are present.

- **Evaluation: N/A**

12.8 Whale Migration and Feeding Areas

Uses and activities within or adjacent to coastal waters shall not interfere with migration or feeding of whales. Interference refers to conduct or activities that disrupt an animal's normal behavior or cause a significant change in the activity of the affected animal.

- **Evaluation: UOCC has made application for an IHA that addresses marine mammals and mitigation monitoring techniques to reduce the likelihood of take and impacts.**

12.9 Bald Eagles and Nest Sites

Activities shall avoid harming or disturbing bald eagles or their nest sites in accordance with the Bald Eagle Protection Act (16 USC668) by timing operations when eagles are not breeding or nesting (generally September 1 to March 1), retaining a buffer of undisturbed natural vegetation around occupied and unoccupied nest trees, or both. The use and size of buffers shall be determined on a case-by-case basis by the U.S. Fish and Wildlife Service and Alaska Department of Fish and Game and may vary with topography, timber type, wind firmness, type of activity, or other factors, but will generally be about 330 feet wide.

- **Evaluation: UOCC will obtain bald eagle nesting maps for the project area from the US Fish and Wildlife Service in order to avoid harming or disturbing bald eagles or their nest sites in accordance with the Bald Eagle Protection Act (16 USC 668).**

13. Air, Land, and Water Quality

13.1 Hazardous and Toxic Substances

Hazardous materials, petroleum, or petroleum products as defined in State and federal regulations, shall not be disposed of in the Borough unless done so at a facility designed and approved for this purpose.

13.2 Storage of Petroleum and Petroleum Products

- a. To the extent feasible and prudent, facilities for the storage, processing, or treatment of petroleum or petroleum products exceeding 660 gallons capacity shall not be sited within the 100 year floodplain.
- b. Where petroleum-related storage is permitted outside of the 100-year floodplain, buffer zones of not less than 100 feet shall be required to separate oil storage facilities from rivers, streams, lakes, wells, wetlands, or marine waters which provide domestic or public water supplies, or support anadromous fish populations, as well as areas of human settlement or use which are highly susceptible to petroleum contamination. Buffer zone widths greater than 100 feet maybe established by the Borough in consultation with the Alaska Departments of Environmental Conservation and Natural Resources and shall be based on site criteria, such as depth of seasonal high water table, slope, aspect, and permeability of surrounding soils and substrata.
- c. Impermeable berms and basins capable of retaining 110 percent of storage capacity plus 12 inches of freeboard shall be required for all above-ground storage facilities to minimize the potential for uncontained spills or leaks.

- **Evaluation: a);b);c)Fuel storage/bladders are placed in an impermeable secondary containment system that is capable of containing 110% of the volume of the fuel tank plus 12 inches of freeboard. Temporary fuel**

storage locations will not be sited within a floodplain or within 100 feet of any river, lake or stream.

14.0 Archaeological and Historic Resources

14.1 Historical and Prehistoric Sites

Prior to development activities, historical and prehistoric sites identified and listed on the Alaska Heritage Resource Inventory will be reviewed by the Department of Natural Resources. The inventory is maintained by the Division of Parks and Outdoor Recreation, Office of History and Archaeology.

14.2 Protection from Disturbance

If previously undiscovered artifacts or areas of historic, prehistoric, or archaeological importance are encountered during development activities, the site shall be protected from further disturbance and the State Historic

Preservation Office shall immediately be notified to evaluate the site or artifacts. •

Evaluation: 14.1-14.2; Identified areas important to national, state or local history or prehistory will be avoided in the proposed program. SHPO, will review a program map and setback distances will be established. Should a site of cultural or historical significance be suspected or revealed UOCC will stop any work that would disturb any resources and notify the SHPO.